Fact Sheet
April 2004

Stringfellow Superfund Site Perchlorate Update

GLEN AVON , CALIFORNIA

Percholorate Remedial Investigaton/Feasibility Study

Introduction

In 2001 the Department of Toxic Substances Control (DTSC) identified the presence of the chemical perchlorate in the groundwater of the Stringfellow Superfund Site (Site) and extending into groundwater beneath the community of in Glen Avon, California (see enclosed map of the perchlorate plume). The Site is a closed hazardous waste facility that received 35 million gallons of hazardous waste from 1956 to 1972. It is located in Pyrite Canyon, three quarters of a mile north of Highway 60 at the Pyrite off-ramp. DTSC announced preliminary results of perchlorate findings in groundwater at the Site in a June, 2001 fact sheet.

Since then DTSC has provided municipal water to effected residents and has been conducting extensive investigations to determine the extent of perchlorate contamination. This fact sheet provides you information on the contractor DTSC has hired to complete the remedial investigation and feasibility study and our investigation to date. It also contains new information on perchlorate, Site background, Site status, the health effects of perchlorate, Site investigations and remediation activities. It also provides information contacts, information repositories, mailing list information and announces a new display at the Jurupa Mountains Cultural Center.

What is Perchlorate?

Perchlorate is a salt, most commonly as ammonium perchlorate, which is used in solid fuel rockets, matches, and other applications. It is used because it provides the oxygen that the rocket or match needs to burn. When any perchlorate salt, such as ammonium perchlorate is dissolved in groundwater, the perchlorate is freed from ammonium and perchlorate moves rapidly with the water. Ammonium does not move freely in the water.

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Over the last several years new analytical techniques have been developed that have permitted the detection of perchlorate in groundwater at levels as low as 4 parts per billion (ppb). As a result, perchlorate has recently been detected in many groundwater wells in California where it was previously not recognized. One of the key sources of perchlorate found in groundwater in Southern California is the manufacturing and disposal of rocket fuel.

Where was it found?

There is a well-documented plume of solvent-contaminated groundwater migrating from the Site. Preliminary sampling results indicated that the plume also contained perchlorate. The highest level of perchlorate found in the community area was 81 parts per-billion (ppb) at the north end of the plume. DTSC conducted sampling of private wells and groundwater monitoring wells to determine the extent of perchlorate contamination. Perchlorate concentrations decline to the south to between zero and 10 ppb near the Santa Ana River.

Effects of Perchlorate

The Office of Environmental Health Hazard Assessment has recently completed its toxicological evaluation of perchlorate and drafted the Public Health Goal (PHG) for perchlorate in drinking water. The PHG is developed based on the current available toxicological data from the scientific literature. The PHG will be used by the California Department of Health Services to establish a primary drinking water standard (State Maximum Contaminant Level or MCL) for perchlorate. The MCL is set at a level as close as is feasible to the PHG. The PHG for perchlorate established in March 2004 is 6 parts per billion (ppb). It is anticipated that it will take another year to establish an MCL. In the interim DHS has changed their Action Level from 4 to 6 ppb pursuant to the PHG. The Action Level had been formerly set at 4 ppb because that had been the reliable analytical detection limit used to measure perchlorate. Several reports have appeared in the press about perchlorate being present in lettuce and other foods. While perchlorate in irrigation water will end up in some plants, it has not been determined at what level there would be any health effects.

Perchlorate Investigation

The initial goal of the investigation was to determine the impact of perchlorate on private domestic wells and to supply alternate water supplies for impacted residents. This investigation proceeded smoothly thanks to the cooperation of residents and businesses that provided access to their wells. All residents who had private wells and were not connected to the Jurupa Community Services District (JCSD) system were provided, at no charge, connections to the JCSD system. While these connections were being made, which in many cases required major extensions to the JCSD water main system, bottled water was provided for drinking and cooking.

Concurrently DTSC has begun a detailed remedial investigation to determine the extent of the perchlorate plume and identify potential locations for treatment systems. This work has included remote sensing tests that provide a picture of the underlying soil and rocks followed by direct push sampling. The direct push sampling system provided a sample of the underlying soil and water for direct chemical analysis. The information provided by these tests gives the DTSC staff enough information to accurately locate groundwater monitoring wells.

Twenty three new groundwater monitoring wells have been installed south of Jurupa Ave. and north of 54th Street between Van Buren Ave. and the Pedley Hills. The next step will be to determine which if any of these wells should be converted to extraction wells. The extraction wells would be used to treat contaminated ground water.

Remedial Investigation/Feasibility Study

The next phase of the investigation is a detailed remedial investigation and feasibility study (RI/FS). DTSC has hired Kleinfelder, Inc. to perform the Zone 4 RI/FS for perchlorate contamination. Zone 4 is the area south of the of the 60 Freeway (see map). Kleinfelder will develop a work plan to be submitted to DTSC and will be subject to public review. Duties will include evaluating and implementing interim measures, investigating and evaluating long term remediation strategies and reporting to DTSC and the community on progress.

Jurupa Exhibit (pictured above)

DTSC announces the unveiling of a special exhibit at the Jurupa Mountains Cultural Center near Glen Avon. The purpose of the exhibit is to introduce viewers to the local geology, environment, the Stringfellow site and the ongoing cleanup efforts. The display consists of aerial photos, a hot button model of the Jurupa Mountains that features topography and geographic locales such as quarries, schools, and the Stringfellow Site.

The Jurupa Mountains Cultural Center is located at 7621 Granite Hill Drive by Glen Avon, California. For information on the exhibit and the cultural center phone (909) 685-5818.

For More Information or if You Have a Well in the Affected Area

DTSC Contacts:

If you would like to leave a message on the local Stringfellow hot line, please call (909) 782-4267, and a DTSC staff member will get back to you.

If you would like to talk directly to a DTSC staff member; please contact Randy Sturgeon, DTSC Public Participation Specialist at:

Phone number- (916) 255-3649
Fax- (916) 255-3654
E-mail- rsturgeo@dtsc.ca.gov

Media Contact:

If you are a member of the media and would like information on the Stringfellow Site please contact Jeanne Garcia, Public Information Officer at:

Phone number- (818) 551-2176
Fax- (818) 551-2850
E-mail- JGarcia1@dtsc.ca.gov

Notice to the Hearing Impaired

You can obtain additional information by using the California State relay Service at 1-888-877-5378 (TDD). Ask them to contact Randy Sturgeon at (916) 255-3649 regarding the Stringfellow Superfund Site.

Mailing List Information

If you did not receive this fact sheet in the mail and wish to be on the DTSC mailing list for this site please fill out the coupon below and mail it to Randy Sturgeon, DTSC Public Participation Specialist, 8800 Cal Center Drive, Sacramento, CA 95826.

Please add me to the Stringfellow Superfund Site mailing list. DTSC mailing lists are solely for the purpose of keeping persons informed of DTSC activities. Mailing lists are not routinely released to outside parties. However, they are considered public records and, if requested, may by subject to release.

Name:

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